AMENDMENTS TO THE CLAIMS

A complete listing of claims appears below. No claims are amended, and no new claims are presented.

1-43. (Canceled).

44. (Previously Presented) A method for analyzing an arthropod sample for the presence of one or more analytes associated with an arthropod-carried agent that causes a disease in mammals, said method comprising the steps of:

obtaining an arthropod sample suspected of containing arthropod-borne agents;

grinding the sample in solution to expose an analyte associated with the arthropod-carried agent such that the sample contains arthropod debris after grinding;

contacting the sample containing arthropod debris with a liquid permeable support and at least one detectable analyte-specific reagent that binds to the analyte to form an analyte-reagent complex;

allowing the liquid phase to move through the support by capillary flow or wicking until the analyte or the analyte-specific reagent or the analyte-specific reagent complex binds to at least one capture reagent immobilized on the support; and

detecting the presence of the detectable analyte-specific reagent indicating the presence of the analyte in the sample,

wherein a plurality of detectable analyte-specific reagents for a plurality of arthropod-carried agents are employed and the support comprises a plurality of capture reagents immobilized onto a plurality of different detection areas.

45. (Previously Presented) The method of claim 44, wherein the detectable analyte-specific reagent further comprises a detectable moiety selected from the group consisting of a colored moiety, a magnetic moiety, a radioactive moiety and an enzyme.

46. (Previously Presented) The method of claim 44, wherein the detectable analyte-specific reagent is deposited on the support prior to contacting the sample.

47. (Previously Presented) The method of claim 44, wherein at least three detectable analyte-specific reagents for at least three different arthropod-carried agents associated with human malaria are employed and the support comprises at least three capture reagents immobilized onto at least three different detection areas.

48. (Withdrawn) The method of claim 44, wherein the arthropod-carried agent is a togavirus.

49. (Withdrawn) The method of claim 48, wherein the togavirus is an encephalitis virus.

50. (Withdrawn) The method of claim 48, wherein the togavirus is a flavivirus.

51. (Withdrawn) The method of claim 50, wherein the flavivirus is Dengue.

52. (Withdrawn) The method of claim 51, wherein the flavivirus is an encephalitis virus.

53 (Withdrawn) The method of claim 52, wherein the encephalitis virus is West Nile Fever.

54. (Previously Presented) The method of claim 44, wherein the arthropod is a mosquito.

55 (Previously Presented) The method of claim 54, wherein the sample is homogenized with a grinding solution prior to contact with said support.

56. (Previously Presented) The method of claim 44, wherein the support further comprises a control area having immobilized therein at least one reagent suitable for capturing the detectable analyte-specific reagent.

57. (Withdrawn) The method of claim 44, further employing at least two detectable analyte-specific reagents, said reagents specific for a protein associated with *Plasmodium falciparum* circumsporozoite and a second specific for a protein associated with a *Plasmodium vivax* sporozoite and at least two different detection areas, on area having

immobilized therein a capture reagent specific for the protein associated with *Plasmodium falciparum* sporozoite, and the second area having immobilized therein a capture reagent specific for the protein associated with a *Plasmodium vivax* sporozoite.

58. (Withdrawn) The method of claim 44, wherein the *Plasmodium falciparum* sporozoite is a *Plasmodium vivax* 210.

59. (Withdrawn) The method of claim 44, wherein the *Plasmodium falciparum* sporozoite is a *Plasmodium vivax* 247.

60. (Previously Presented) The method of claim 44, wherein the analyte-specific reagents are monoclonal antibodies.

61. (Previously Presented) The method of claim 44, wherein the detectable analyte-specific reagents are gold-antibody conjugates.

62. (Previously Presented) The method of claim 44, wherein the detectable analyte-specific reagents are colored latex-antibody conjugates.

63. (Previously Presented) A method for analyzing an arthropod sample for the presence of one or more analytes associated with an arthropod-carried agent that causes a disease in mammals, said method comprising the steps of:

obtaining an arthropod sample suspected of containing arthropod-borne agents;

grinding the sample in solution to expose an analyte associated with the arthropod-carried agent such that the sample contains arthropod debris after grinding;

contacting the sample containing arthropod debris with a dipstick and at least one detectable analyte-specific reagent that binds to the analyte to form an analyte-reagent complex;

allowing the liquid phase to move through the dipstick until the analyte or the analyte-specific reagent or the analyte-specific reagent complex binds to at least one capture reagent immobilized on the dipstick; and

detecting the presence of the detectable analyte-specific reagent indicating the presence of the analyte in the sample,

wherein a plurality of detectable analyte-specific reagents for a plurality of arthropod-carried agents are employed and the support comprises a plurality of capture reagents immobilized onto a plurality of different detection areas.

64. (Previously Presented) The method of claim 63, wherein the detectable analyte-specific reagent further comprises a detectable moiety selected from the group consisting of a colored moiety, a magnetic moiety, a radioactive moiety and an enzyme.

65. (Previously Presented) The method of claim 63, wherein the detectable analyte-specific reagent is deposited on the support prior to contacting the sample.

66. (Withdrawn) The method of claim 63, wherein the arthropod-carried agent is a togavirus.

67. (Withdrawn) The method of claim 66, wherein the togavirus is an encephalitis virus.

68. (Withdrawn) The method of claim 66, wherein the togavirus is a flavivirus.

69. (Withdrawn) The method of claim 68, wherein the flavivirus is Dengue.

70. (Withdrawn) The method of claim 68, wherein the flavivirus is an encephalitis virus.

71. (Withdrawn) The method of claim 70, wherein the encephalitis virus is West Nile Fever.

72. (Previously Presented) The method of claim 63, wherein the arthropod is a mosquito.

73. (Previously Presented) The method of claim 63, wherein the sample is homogenized with a grinding solution prior to contact with said support.

74. (Previously Presented) The method of claim 63, wherein the support further comprises a control area having immobilized therein at least one reagent suitable for capturing the detectable analyte-specific reagent.

75. (Previously Presented) The method of claim 63, wherein the analyte-specific reagent is a monoclonal antibody.

76. (Previously Presented) The method of claim 63, wherein the detectable analyte-specific reagent comprises gold-antibody conjugates.

77. (Previously Presented) The method of claim 63, wherein the detectable analyte-specific reagents comprises colored latex-antibody conjugates.

78. (Previously Presented) The method of claim 63, wherein at least three detectable analyte-specific reagents for at least three different arthropod-carried agents associated with human malaria are employed and the support comprises at least three capture reagents immobilized onto at least three different detection areas.

79. (Previously Presented) A method for analyzing an arthropod sample for the presence of one or more analytes associated with an arthropod-carried agent that causes a disease in mammals, said method comprising the steps of:

obtaining an arthropod sample suspected of containing arthropod-borne agents;

grinding the sample in solution to expose an analyte associated with the arthropod-carried agents such that the sample contains arthropod debris after grinding;

contacting the sample containing arthropod debris with a panel assay having capture reagents immobilized onto separate areas and detectable analyte-specific reagents specific for an analyte associated with each arthropod-borne agent to which the capture reagents are directed;

allowing the liquid phase to move through the panel assay by capillary flow or wicking until the analyte or one of the analyte-specific reagents binds to one of the capture reagents; and

detecting the presence of the analyte-specific reagents indicating the presence of the analyte in the sample,

wherein a plurality of detectable analyte-specific reagents for a plurality of arthropod-carried agents are employed and the support comprises a plurality of capture reagents immobilized onto a plurality of different detection areas.

80. (Previously Presented) The method of claim 79, wherein one of the analyte-specific reagents further comprises a detectable moiety selected from the group consisting of a colored moiety, a magnetic moiety, a radioactive moiety and an enzyme.

81. (Previously Presented) The method of claim 79, wherein one of the detectable analyte-specific reagents is deposited on the support prior to contacting the sample.

82. (Withdrawn) The method of claim 79, wherein one of the arthropod-carried agents is a togavirus.

83. (Withdrawn) The method of claim 82, wherein the togavirus is an encephalitis virus.

84. (Withdrawn) The method of claim 82, wherein the togavirus is a flavivirus.

85. (Withdrawn) The method of claim 84, wherein the flavivirus is Dengue.

86. (Withdrawn) The method of claim 84, wherein the flavivirus is an encephalitis virus.

87. (Withdrawn) The method of claim 86, wherein the encephalitis virus is West Nile Fever.

88. (Previously Presented) The method of claim 79, wherein the arthropod is a mosquito.

89. (Previously Presented) The method of claim 79, wherein the sample is homogenized with a grinding solution prior to contact with said panel assay.

90. (Previously Presented) The method of claim 79, wherein one of the analyte-specific reagents is a monoclonal antibody.

91. (Previously Presented) The method of claim 79, wherein one of the detectable analyte-specific reagents comprises gold-antibody conjugates.

92. (Previously Presented) The method of claim 79, wherein one of the plurality of detectable analyte-specific reagents comprises colored latex-antibody conjugates.

93. (Withdrawn) A method for analyzing an arthropod sample for the presence of one or more analytes associated with an arthropod-borne agent that causes a disease in mammals, said method comprising the steps of:

obtaining an arthropod sample suspected of containing arthropod-borne agents;

grinding the sample in solution to expose an analyte associated with the arthropod-borne agent such that the sample contains arthropod debris after grinding;

contacting the sample containing arthropod debris with a liquid permeable support and at least one detectable analyte-specific reagent that binds to the analyte to form an analyte-reagent complex;

allowing the liquid phase to move through the support by capillary flow or wicking until the analyte or the analyte-specific reagent or the analyte-specific reagent complex binds to at least one capture reagent immobilized on the support; and

detecting the presence of the arthropod-borne agent on the liquid permeable support,

wherein the at least one detectable analyte-specific reagent is specific for one or more malarial analytes associated with *Plasmodium* sporozoite.

94 (Withdrawn) The method of claim 93, wherein the at least one detectable analyte-specific reagent is specific for a protein associated with *Plasmodium falciparum* circumsporozoite and a protein associated with a *Plasmodium vivax* sporozoite.

95. (Withdrawn) The method of claim 94, wherein the *Plasmodium falciparum* sporozoite is a *Plasmodium vivax* 210.

96. (Withdrawn) The method of claim 94, wherein the *Plasmodium falciparum* sporozoite is a *Plasmodium vivax* 247.

97. (Withdrawn) The method of claim 93, wherein the at least one detectable analyte-specific reagent further comprises a detectable moiety selected from the group consisting of a colored moiety, a magnetic moiety, a radioactive moiety and an enzyme.

98. (Withdrawn) The method of claim 93, wherein the detectable analyte-specific reagent is deposited on the liquid permeable support prior to contacting the sample.

99. (Withdrawn) The method of claim 93, wherein a plurality of detectable analyte-specific reagents for a plurality of different arthropod-carried agents associated with human malaria are employed and the liquid permeable support comprises a plurality of capture reagents immobilized onto a plurality of different detection areas.

100. (Withdrawn) The method of claim 93, wherein the arthropod is a mosquito.

101. (Withdrawn) The method of claim 100, wherein the sample is homogenized with a grinding solution prior to contact with the liquid permeable support.

102. (Withdrawn) The method of claim 93, wherein the liquid permeable support further comprises a control area having immobilized therein at least one reagent suitable for capturing the at least one detectable analyte-specific reagent.

103. (Withdrawn) The method of claim 93, wherein the at least one detectable analyte-specific reagent comprises a monoclonal antibody.

104. (Withdrawn) The method of claim 93, wherein the at least one detectable analyte-specific reagent comprises a gold-antibody conjugate.

105. (Withdrawn) The method of claim 93, wherein the at least one detectable analyte-specific reagent comprises a colored latex-antibody conjugate.